Technology Integration for Meaningful Classroom Use

Unit Lesson Plan

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| Lesson Title: Did your Tower Withstand the Pressure | | | |
| Grade Level: 9-12 | | Unit: Structures | |
| Goals | | | |
| Content Standards:  *New York State Standards:*   * ELA: 1 Students will read, write, listen, and speak for information and understanding. * MST: 2 Students will access, generate, process, and transfer information using appropriate technologies. * MST: 5 Students will apply technological knowledge and skills to design, construct, use, and evaluate products and systems to satisfy human and environment needs. | | | |
| ISTE NETS-S:  x Creativity and Innovation  x  x Communication and collaboration  Research and information fluency  x Critical thinking, problem solving, and decision making  x Digital citizenship  x Technology operations and concepts  Instructional Objectives:   * Students will be able to reflect on their project after Test Day. They will need to answer some questions to why or why not their tower did not work. * Students will be able to use a Wiki in their reflection. | | | |
| Action | | | |
| Before-Class Preparation:  Before class begins make sure all the computers are turned on and running properly. Make sure the Wiki is set-up for instruction in the classroom. | | | |
| During Class | | | |
| Time | Instructional Activities | | Materials and Resources |
| 20 Minutes | Students will be shown a PowerPoint Presentation on how important structures are to society, and what would happen if they fail. | | Projector, Internet Access, Power Point |
| 15 Minutes | After showing students the PowerPoint, they will be able to logon to their computers. Step by step students will log in to wiki spaces. Students will create an account and enter into my wiki that is set-up for that class. Students will need to create a page and call it by their full name. | | Internet Access |
| 30 Minutes | Using their prior knowledge of structures, students will reflection on some basic essential questions. Students will then answer them and include them on their wiki page.  Some questions they will need to answer:   * Why do you think your Tower failed? * What could you have done differently to your project to improve the integrity? * Was there anything that we should change in the specifications to make the project more manageable? * Should we use different material to build your towers? If yes what? * From a scale from 1-10 how did you like this project? | | Internet Access |
| 20 Minutes | Students will post 2 positive comments on their classmates’ pages about the outcome of their towers. | | Internet Access |
| Monitor | | | |
| Ongoing Assessment:  The teacher will be facilitating while students are on the computer. The teacher will be able to assess student’s progress thru the Wiki. | | | |
| Accommodations and Extensions:  Students that need to be accommodated will be working with a Teacher’s Aide in order to develop online collaboration between students in the class. | | | |
| Back-Up Plan:  If students are not able to access internet, students will be given print out sheets of the reflection questions they need to answer and then will go onto the Wiki when available. | | | |
| Evaluation | | | |
| Lesson Reflections and Notes:  The teacher will need to evaluate how well students use the Wiki for reflection on their project. Students will need to be able to use the Wiki to create their own Student Online Portfolio in later lessons. | | | |